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Kimbley L Muller c/o Shell Oil Company Legal Intellectual Property			EXAMINER	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 14

Application Number: 09/648,325 Filing Date: August 25, 2000 Appellant(s): HOLMES ET AL.

Jennifer D. Adamson For Appellant MAILED

JUL 2 4 2003

**EXAMINER'S ANSWER** 

**GROUP 1700** 

This is in response to the appeal brief filed May 19, 2003.

# (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

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## (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

## (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: The rejection of claims 1 and 4-6 under 35 U.S.C. § 103(a) based on Denis et al., U.S. Patent 4,954,273 is withdrawn.

# (7) Grouping of Claims

Appellant's brief includes a statement that the claims stand or fall together.

# (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (9) Prior Art of Record

4,462,918	MATTHEWS et al.	07/1984
4 627 928	KARN	12/1986

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6,114,288 FUJITSU et al. 09/2000

0 434 464 A1 European Patent Application 06/1991

#### (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 4-6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews et al. in view of European Patent Application 0 434 464 A1 and Karn.

Matthews et al., U.S. Patent 4,462,918, teach lubricating oil compositions, and in particular a lubricating oil composition which may be used as a hydraulic fluid (column 1, lines 5-7). The composition comprises a major proportion of a lubricating oil and a minor proportion of each of a Group II metal dithiophosphate and a compound of applicants' formula I (column 1, lines 30-48). The combination of the Group II metal dithiophosphate anti-wear additive with compounds of formula I gives improved anti-wear performance (column 1, lines 49-60). Most preferably, the Group II metal dithiophosphate is a zinc dialkyl dithiophosphate of which the alkyl groups contain 3-20 carbon atoms (column 2, lines 7-14). The combination of additives may suitably be used with other additives (column 2, lines 38-42). While Matthews et al. teach the addition of other additives, Matthews et al. differ from the instant claims in not teaching the addition of a magnesium salicylate.

European Patent Application 0 434 464 A1 (hereafter EPA '464) teach lubricant compositions especially useful as hydraulic fluids containing an amino succinate ester as corrosion inhibitor (abstract). EPA '464 teach that when used in an acidic environment, it can be desirable to incorporate, inter alia, overbased alkylsalicylate (page 3, lines 49-52).

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Karn, U.S. Patent 4,627,928, is relied on as teaching overbased magnesium alkylsalicylates as additives for hydraulic fluids (column 17, lines 41-47).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add the overbased magnesium alkylsalicylate of Karn to the lubricating composition of Matthews et al. as taught by EPA '464 and because Matthews et al. specifically teach that other additives may be incorporated into the composition of their invention.

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujitsu et al. in view of Matthews et al.

Fujitsu et al., U.S. Patent 6,114,288, teach lubricating oil compositions comprising a zinc dialkyldithiophosphate and a metallic detergent chosen from calcium alkylsalicylate and a mixture of calcium alkylsalicylate and magnesium alkylsalicylate (abstract). In Tables 2 and 3 of Fujitsu et al., lubricating compositions comprising magnesium salicylate, zinc dialkyldithiophosphate, defoaming agent and pour point depressant are disclosed. In column 5, lines 13-15, Fujitsu et al. specifically teach the addition of alkenyl succinic acid or ester moieties thereof as rust preventing additives for their lubricating compositions.

Matthews et al., U.S. Patent 4,462,918, teach lubricating oil compositions comprising a major proportion of a lubricating oil and a minor proportion of each of a Group II metal dithiophosphate and a compound of applicants' formula I (column 1, lines 30-48). The combination of the Group II metal dithiophosphate anti-wear additive with compounds of formula I used as anti-rust agents in lubricating oil compositions gives improved anti-wear performance (column 1, lines 49-60). The combination of additives may suitably be used with other additives (column 2, lines 38-42).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a compound of formula I as taught by Matthews et al. in the lubricating composition of Fujitsu et al. because Fujitsu et al. specifically teach the addition of such compounds. Additionally, one having ordinary skill in the art would have been motivated by the desire to increase the anti-wear performance of the lubricating composition as taught by Matthews et al.

### (11) Response to Argument

Applicants argue

[t]he '464 reference teaches the addition to a hydraulic fluid of an overbased alkyl salicylate, with no specific suggestion for the addition of magnesium salicylate as opposed to any other alkaline earth metal salicylate, as well as the addition of an amino ester of a carboxylic acid according to the formula of the instant invention. However, this reference relates to hydraulic fluids that are zinc free (page 2, line 9) and emphasizes that an important advantage of the invention is that it does not include transition metal compounds, and further discloses that hydraulic fluids containing such compounds do not always perform according to required specifications. Therefore, the '464 reference teaches away from arriving at a combination of additives that includes a zinc dithiophosphate. (Brief, page 5).

Applicants' argument lacks merit.

While EPA '464 teaches hydraulic fluids which are free from heavy metals, EPA '464 does not teach that an overbased alkylsalicylate cannot be used in a hydraulic fluid containing heavy metals. As cited above, EPA '464 has been relied on as teaching that when a hydraulic fluid is used in an acidic environment, it can be desirable to incorporate, *inter alia*, an overbased alkylsalicylate (page 3, lines 49-52). Accordingly, it would have been obvious to include an overbased alkylsalicylate in a hydraulic fluid as taught by Matthews et al.; said fluid to be used in an acidic environment.

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## Applicants argue

[t]he '288 reference discloses adding a zinc dialkyldithiophosphate and magnesium salicylate to a motor oil. An ester of a carboxylic acid is neither taught nor suggested. The '918 reference discloses adding a Group II metal dithiophosphate and an ester of a carboxylic acid to hydraulic fluid. There is no teaching or suggestion in the '918 reference that would lead the person of ordinary skill in the art to combine it with the '288 reference by adding magnesium salicylate to the composition. As there is no suggestion to combine these references, a *prima facie* case for obviousness has not been made. (Brief, page 6).

Applicants arguments lack merit.

Fujitsu et al. teach lubricating oil compositions comprising a zinc dialkyldithiophosphate and a metallic detergent chosen from calcium alkylsalicylate and a mixture of calcium alkylsalicylate and magnesium alkylsalicylate (abstract). In column 5, lines 13-15, Fujitsu et al. specifically teach the addition of alkenyl succinic acid or ester moieties thereof as rust preventing additives for their lubricating compositions. The claimed compounds of formula I are "alkenyl succinic acid or ester moieties thereof" having rust preventing properties.

Matthews et al. teach that the combination of the Group II metal dithiophosphate antiwear additive with compounds of formula I used as anti-rust agents in lubricating oil compositions gives improved anti-wear performance (column 1, lines 49-60). The combination of additives may suitably be used with other additives (column 2, lines 38-42).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a compound of formula I as taught by Matthews et al. in the lubricating composition of Fujitsu et al. because Fujitsu et al. specifically teach the addition of such compounds. Additionally, one having ordinary skill in the art would have been

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motivated by the desire to increase the anti-wear performance of the lubricating composition as taught by Matthews et al.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted

Jerry D. Johnson Primary Examiner Art Unit 1764

JDJ July 22, 2003

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